

1 **ABSTRACT**

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3 'Improvements in or relating to vibration control'

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(Figure 1)

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6 A variable damper with a low off-state, having an outer
7 member including a magnetic sleeve and an inner shaft,
8 between which is supported an electromagnet.

9 Magnetorheological fluid is inserted between the members
10 and a flow path is established over a control region
11 between the electromagnet and the sleeve. Various
12 embodiments of the damper are presented with the
13 electromagnet supported on the outer member and on the
14 shaft. A vibration control system incorporating a
15 magnetorheological fluid variable damper is presented
16 wherein the system provides a relative figure of merit
17 for vibration control of at least 0.83. Devices
18 incorporating the damper in a vibration control system
19 are presented for snow boards, clubs, drills, engines,
20 pumps, generators and vehicles.

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